

REMARKS

Claims 1-18 are pending in the above-identified application, of which claims 1-9 are withdrawn from consideration.

In the Office Action, Claims 10-18 were rejected and the Specification was objected to.

In this Amendment, Claims 10 and 14 are amended. No new matter has been introduced as a result of this matter.

Accordingly, Claims 10-18 are at issue.

I. Objection to the Specification

The Specification is objected to because of informalities. Applicants respectfully traverse this objection to the Specification.

Chemical Formula 1 is given as “SnMI_x”, where MI represents at least one kind selected from elements capable of forming an intermetallic compound with tin. Further the intermetallic compound MI is cited as being Cu₃Sn, Cu₆Sn₅, FeSn, CoSn, CoSn₂ or Co₃Sn₂. Thus, unlike the Sn in the “SnMI” formula 1 which can only be Sn₁, the Sn in the intermetallic compound MI can be Sn₁, Sn₂ or Sn₅.

Accordingly, Applicants respectfully request that the objection to the Specification be withdrawn.

II. 35 U.S.C. § 112 Rejection of Claims 10 -1 8

Claims 10 and 14 are rejected because it is unclear how the material can be comprised of Sn, CoSn₂, CoSn, Co₃Sn₂ and an alloy comprising lithium and at least one element selected from the listed all in the same particle. Applicants respectfully traverse these claim rejections.

Applicants disclose that on page 13, line 17 to page 14, line 8:

“After that, the thin piece was pulverized by using a vibration mini-cup mill MC-4A manufactured by Ito Seisakusho to obtain powder with an average particle diameter of 15 g m. When the structure of the obtained powder was analyzed by using a powder X-ray diffractometer Geiger-Flex RAD-IIC manufactured by Rigaku, materials shown in Tables 1 through 3 were observed. In Tables 1 through 3, the observed material was marked with 0, and the material not observed was marked with X. Moreover, the powder was analyzed by a particle analyzer PT1000 manufactured

by Yokogawa Electric Corporation, the concentration ratio of copper, iron or cobalt to tin in each particle was substantially the same, so it was confirmed that it was not a particle of metallic tin. In other words, it was confirmed that the obtained powder was a tin-containing material including the materials shown in Tables 1 through 3 in the same particle. In Table 4, the JCPDS (Joint Committee of Powder Diffraction Standard; powder X-ray diffraction standard data) numbers of the observed materials were shown.”

Thus, a particle refers to an element of a powder obtained by pulverizing a thin piece made of an alloy. Moreover, the Bito reference cited by the Examiner also states that “the negative electrode of the present invention comprises alloy particles having a composition represented by the formula...” (See column 3, lines 12 – 14) and further that: “It is desirable that both of Phase A and Phase B in one particle are constituted of a plurality of crystal grains” (See column 4, lines 1 – 3).

Thus, Applicants submit that the “particle” limitation is clear to one of ordinary skills in the art.

Accordingly, Applicants respectfully request that these claim rejections be withdrawn.

III. 35 U.S.C. § 102 Anticipation Rejection of Claims & 35 U.S.C. § 103 Obviousness Rejection of Claims

Claims 10-11 and 14-15 were rejected under 35 U.S.C. § 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Bito et al. (“Bito”) (U.S. Patent No. 6,265,111).

Applicants’ independent claims 10 and 14, each as amended, each claim subject matter relating to a tin-containing material including metallic tin, CoSn_2 , CoSn , and Co_3Sn_2 and an alloy comprising lithium and at least one element selected from the group of elements consisting of boron, gallium, antimony, cadmium, silver, and hafnium, in the same particle. This is unlike *Bito*, which fails to disclose or suggest an anode that includes at least one element selected from the group of elements consisting of boron, gallium, antimony, cadmium, silver, and hafnium, in the same particle.

Therefore, for at least this reason, *Bito* fails to disclose or suggest all of the limitations of claims 10 and 14.

Claims 12, 13, and 16-18 depend directly or indirectly from claim 10 or 14 and are therefore patentable for at least the same reasons that claims 10 and 14 are patentable.

Applicants respectfully submit the rejection has been overcome and request that it be

withdrawn.

IV. Conclusion

In view of the above amendments and remarks, Applicant submits that Claims 10 – 18 are clearly patentable over the cited prior art, and respectfully requests early and favorable notification to that effect.

Respectfully submitted,

Dated: March 7, 2007

By: David R. Metzger
David R. Metzger
Registration No. 32,919
SONNENSCHNEIN NATH & ROSENTHAL LLP
P.O. Box 061080
Wacker Drive Station, Sears Tower
Chicago, Illinois 60606-1080
(312) 876-8000